

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims are listed below for the convenience of the Examiner. No changes have been made. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (Previously Presented) A method for computer-aided monitoring of a telecommunication network formed of devices capable of communication, said method comprising:
  - determining training activity parameters, each describing activity of at least one of a corresponding device and a corresponding service;
  - determining possible dependences between devices and services from the training activity parameters;
  - determining from the possible dependences a normal range of dependence for at least some of the devices and services in essentially undisturbed states to train a neural network as a statistical estimator;
  - determining current activity parameters, each describing activity of at least one of a corresponding device and a corresponding service;
  - comparing the current activity parameters by the statistical estimator with the normal range of dependence; and
  - determining from said comparing whether at least one of the devices and services in the telecommunication network has a communication performance different from the normal range of dependence in accordance with a predetermined criterion.
2. (Original) The method as claimed in claim 1, wherein at least some of the devices are constructed as terminals capable of communication.
3. (Previously Presented) The method as claimed in claim 1, wherein the training activity parameters are determined within a predetermined time interval.
4. (Previously Presented) The method as claimed in claim 1,
  - wherein said determining of each training activity parameter is performed by the corresponding device, and

wherein said method further comprises transmitting the training activity parameters to an administration unit which performs said comparing and determining based on said comparing.

5. (Previously Presented) The method as claimed in claim 1, wherein said determining of each training activity parameter is performed by a training activity parameter determining unit separate from the corresponding device.

6. (Original) The method as claimed in claim 1, further comprising determining communication-dependent dependences between at least some of the devices and services.

7. (Original) The method as claimed in claim 1, further comprising determining possible directional dependences with regard to directions of communication between at least some of the devices and services.

8. (Previously Presented) The method as claimed in claim 1, further comprising determining data of at least some of the devices and services, and wherein said determining of the training activity parameters is based on the data.

9. (Previously Presented) The method as claimed in claim 1, wherein said determining of the training activity parameters uses all possible pairs of the devices and pairs of services.

10. (Previously Presented) The method as claimed in claim 9, further comprising:  
storing the training activity parameters determined from the pairs of devices in a matrix;  
and  
determining the normal range of dependence from a structure of the matrix.

11. (Previously Presented) The method as claimed in claim 1, wherein at least one of the following parameters is determined as one of the training activity parameters  
data packets sent or received by the at least one of a corresponding device and a corresponding service,  
processor utilization of the corresponding device,  
a number of predetermined system function calls, and  
existence of at least one of predetermined processes and predetermined computer programs.

12. (Canceled).

13. (Original) The method as claimed in claim 1, further comprising generating an alarm signal when at least one device in the telecommunication network differs from the normal range of dependence in accordance with the predetermined criterion.

14. (Original) The method as claimed in claim 1, further comprising at least one of determining a disturbance of one of the devices in the telecommunication network; determining an unauthorized attempt to access one of the devices; and determining an unauthorized access attempt by one of the devices.

Claims 15-26 (Canceled).

27. (Previously Presented) A device for computer-aided monitoring of a telecommunication network formed of devices capable of communication, comprising:

at least one processor to determine training activity parameters, each describing activity of at least one of a corresponding device and a corresponding service, to determine possible dependences between devices and services from the training activity parameters, to determine from the possible dependences a normal range of dependence for at least some of the devices and services in essentially undisturbed states to train a neural network as a statistical estimator, to determine current activity parameters, each describing activity of at least one of a corresponding device and a corresponding service, to compare the current activity parameters by the statistical estimator with the normal range of dependence, and to determine from said comparing whether at least one of the devices and services in the telecommunication network has a communication performance different from the normal range of dependence in accordance with a predetermined criterion.

28. (Previously Presented) At least one computer-readable storage medium storing at least one computer program for computer-aided monitoring of a telecommunication network formed of devices capable of communication, to control a processor to perform a method comprising:

determining training activity parameters, each describing activity of at least one of a corresponding device and a corresponding service;

determining possible dependences between devices and services from the training activity parameters;

determining from the possible dependences a normal range of dependence for at least some of the devices and services in essentially undisturbed states to train a neural network as a statistical estimator;

determining current activity parameters, each describing activity of at least one of a corresponding device and a corresponding service; comparing the current activity parameters by the statistical estimator with the normal range of dependence; and

determining from said comparing whether at least one of the devices and services in the telecommunication network has a communication performance different from the normal range of dependence in accordance with a predetermined criterion.

29. (Previously Presented) At least one computer-readable storage medium storing at least one computer program for computer-aided training of a neural network as a statistical estimator for administering a telecommunication network formed of devices capable of communication, to control a processor to perform a method comprising:

determining training activity parameters, each describing activity of at least one of a corresponding device and a corresponding service;

determining possible dependences between the devices and services from the training activity parameters; and

determining from the possible dependences a normal range of dependence for at least some of the devices and services in essentially undisturbed states to train the statistical estimator for determining current activity parameters, each describing activity of at least one of a corresponding device and a corresponding service and comparing the current activity parameters with the normal range of dependence.